

ABSTRACT

Liquid compositions for use in compression refrigeration, air-conditioning and heat pump systems in which a fluoroalkene containing from 3 to 4 carbon atoms and at least 1 but no more than 2 double bonds is combined with an effective amount to provide lubrication of an essentially miscible organic lubricant comprised of carbon, hydrogen and oxygen and having a ratio of oxygen to carbon effective to provide a degree of miscibility with said fluoroalkene so that when up to five weight percent of lubricant is added to said fluoroalkene the refrigerant has one liquid phase at at least one temperature between – 40 and +70°C. Methods for producing refrigeration and heating with the fluoroalkenes, alone or in combination with the disclosed lubricants, are also disclosed.